NOT FOR PUBLICATION
347
Tussock moths
LGL-3-8V
1556
2278

UNITED STATES DEPARTMENT OF AGRICULTURE

FOREST SERVICE

INTERMOUNTAIN FOREST AND RANGE EXPERIMENT STATION
Reed W. Bailey, Director
U. S. Department of Agriculture
Forest Service

TUSSOCK MOTH INFESTING RANGE PLANTS
CARSON CITY, NEVADA
APPRAISAL SURVEY
June 1958

By

R. I. Washburn, Entomologist

Division of Forest Insect Research
Ogden, Utah

M—5123 U. S. GOVERNMENT PRINTING OFFICE 8—7417

TUSSOCK MOTH INFESTING RANGE PLANTS
CARSON CITY NEVADA
APPRAISAL SURVEY
JUNE 1958

By
R. I. Washburn
Entomologist

At the request of the State Forester of Nevada and the Forest Supervisor, Toiyabe National Forest, an inspection was made June 23-24 to determine the cause and severity of reported damage to range browse plants, principally bitter brush, in the vicinity of Carson City,Nevada. The inspection included parts of the foothill range from Carson City to Reno, Nevada. On June 23 George Zappettini, State Forester for Nevada; Eamor C. Nord, California Forest and Range Experiment Station; Ralph C. Holmgren, Intermountain Forest and Range Experiment Station accompanied the author on an examination of Ash Creek just west of Carson City, Nevada. Part of June 24 was devoted to observations on an area of damaged bitter brush located on the Mt. Rose Highway just inside the boundaries of the Toiyabe National Forest.

In both areas a tussock moth, in epidemic numbers, was found to be feeding on bitter brush, willow, wild rose, and desert peach. The larvae were mature and appeared ready to pupate. It was not possible to determine the species from the larval stage but collections were made and an effort is under way to rear adults for identification. The inspection did not reveal any evidence of virus disease or any abundance of other natural enemies.

The two areas inspected, Ash Creek and Mt. Rose Highway, each contained approximately 20 acres of severe defoliation. (A majority of the bitter brush was nearly completely defoliated.) The extent of the tussock moth outbreak was not determined but it is probable that much of the foothill range between Carson City and Reno supported populations of the tussock moth. Quite possibly other bitter brush ranges in western Nevada and eastern California were subjected to defoliation by this tussock moth.

Severe defoliation by the tussock moth is undesirable since it removes much of the palatable forage and in addition repeated defoliation may eventually cause mortality of some of the browse plants. Therefore, all forest and range workers should be alert to detect tussock moth outbreaks, and should report their occurrence promptly to the forest entomologists of the Forest Experiment Stations. From August through the remainder of the field season, the presence of a tussock moth population can be detected by the presence of egg clusters.

The eggs are laid in masses by the wingless female moths on top of the old cocoon from which they have emerged and are covered with a frothy white substance liberally mixed with hairs from the abdomen. The cocoons, with egg masses, will be found attached to various parts of the shrubs and neighboring plants. The cocoons and egg masses furnish conspicuous evidence of tussock moth. Next spring the eggs will hatch and the small larvae will begin to feed. Epidemic numbers of the tussock moth can be detected in the spring, before feeding becomes conspicuous, by careful examination of the bitter brush, willow, wild rose, and desert peach for the presence of the small hairy larvae.

Mature Tussock moth larvae feeding on bitter brush,
Ash Creek, Nevada (enlarged 3X)